UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/004,350	10/25/2001	Ryong Ryoo	HYLEE56.001AUS	3783

20995 7590 09/29/2003

KNOBBE MARTENS OLSON & BEAR LLP
2040 MAIN STREET
FOURTEENTH FLOOR
IRVINE, CA 92614

EXAMINER
HENDRICKSON, STUART L

ART UNIT	PAPER NUMBER
1754	

DATE MAILED: 09/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)
4350	Ryan
Examiner	**Group Art Unit**
Henderson	1764

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

☒ Responsive to communication(s) filed on 8/4/03.

☐ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

Disposition of Claims

☒ Claim(s) 1-27 is/are pending in the application.

Of the above claim(s) 27 is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-26 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☒ Claim(s) 1-27 are subject to restriction or election requirement

Application Papers

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).

☐ All ☐ Some* ☐ None of the:

☐ Certified copies of the priority documents have been received.

☐ Certified copies of the priority documents have been received in Application No. _____.

☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____.

Attachment(s)

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 3

☒ Notice of Reference(s) Cited, PTO-892

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Interview Summary, PTO-413

☐ Notice of Informal Patent Application, PTO-152

☐ Other _____

Office Action Summary

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-10, 16, 18-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Lee et al.

Lee teaches on pg. 2177 impregnating a molecular sieve with phenol-formaldehyde, polymerizing, carbonizing and etching the template to create a carbon with uniform mesopores. No difference is seen in the product; compare to specification fig. 7.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al., alone or in view of applicant's specification.

Lee does not teach the claimed supports, however applicant appears to admit that they are old and known porous inorganic materials. Using them in place of MCM-48 is an obvious expedient to make a carbon material of a desired structure and/or porosity, based upon the structure of the template.

Claims 12, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. taken with Lester. et al.

Lee does not teach carbohydrates, however Lester does in column 3-4 and 6 in a similar scheme. Using the compounds of Lester in the process of Lee is an obvious expedient to provide a carbon source for making a carbonaceous body.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. taken with Hucke.

Lee does not teach the particular sources, but Hucke does in column 5. Using the compounds of Hucke in the process of Lee is an obvious expedient to provide a carbon source for making a carbonaceous body. The examiner takes Official notice that the other species are old and known are carbonizable compounds, and thus no patentability is seen in claim 17.

Claims 1-6, 8-10, 12-15, 18-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Ryoo et al.

The article appears to be a journal equivalent of the present specification.

Claims 1-6, 8-10, 12-15, 18-26 are rejected under 35 U.S.C. 102(a) as being anticipated by Jun et al.

The article appears to be a journal equivalent of the present specification.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 25 and 26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description or enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

There is no description of how one can make a the structure recited in claims 25 and 26. There is no evidence that these structures are present, particularly since decomposition of organic material is not recognized as a way to make a carbon nanotube.

Any inquiry concerning this communication should be directed to examiner Hendrickson at telephone number (703) 308-2539.

Stuart Hendrickson
examiner Art Unit 1754